Updated Date: April 2019

This resource describes further detail on the Ratio analysis used by the Auditor of Public Accounts as part of the annual Local Fiscal Distress Monitoring Process.
For additional information, refer to the APA's "2018 Local Government Fiscal Distress Overview" document available on our website.

www.apa.virginia.gov/data/download/local_government/guidelines/2018 APA Fiscal Distress Model Overview.pdf

Note: Ratios 1-5 are calculated using the Governmental Activities and Business Type Activities Funds from the Locality's Balance Sheet (Statement of Net Position) and Income Statement (Statement of Net Activities)

Ratio	Ratio Calculations	Ratio Description	Ratio Results Interpretation	Max Points per Ratio	Assignment of Points Based on Ratio Results
1	Cash and Cash Equivalents + Investments - Current Liabilities/ Charges for Services + General Revenues	This ratio measures the sufficiency of unrestricted reserves relative to the locality's normal revenue (non-grant revenue). By comparing the locality's unrestricted liquid assets (net of current liabilities) to its normal revenue, we can see the locality's ability to make up a revenue shortfall or utilize unrestricted reserves during an unforeseen situation.	A higher ratio % suggests a locality is in a desirable position to make up a revenue shortfall or utilize unrestricted reserves during an unforeseen situation. A lower ratio % suggests that a locality may not be in a desirable position to make up a revenue shortfall or utilize unrestricted reserves during an unforeseen situation. A negative ratio % indicates that a locality does not have available unrestricted reserves.	10	A negative ratio or less than 5%= 10 points Ratio that is between 5% to 9.99%= 6.67 points Ratio that is between 10% to 15% = 3.33 points Ratio result is above 15%= 0 points Ratio Weighted at 10%
2	Cash and Cash Equivalents + Investments/ Total (Current and Noncurrent) Liabilities	This ratio measures the sufficiency of unrestricted reserves relative to the locality's total liabilities. By comparing the locality's unrestricted liquid assets to total liabilities, we can see its ability to pay total liabilities without needing additional revenue.	A higher ratio % suggests that a locality is in a desirable position to meet its obligations. A lower ratio % suggests that a locality may not be in a desirable position to meet its obligations without obtaining additional revenues.	5	A ratio less than/equal to 30.00%= 5 points Ratio that is between 30% to 60%= 2.5 Ratio result is above 60%= 0 points Ratio Weighted at 5%
3	Net Position Unrestricted/ Total Expenses	This ratio measures the sufficiency of unrestricted reserves relative to the locality's expenses. By comparing the locality’s unrestricted net position to its total expenses, we can see to what extent the locality can fund expenses from unrestricted reserves in the event of a revenue shortfall or unforeseen situation.	A higher ratio % suggests that a locality is in a desirable position to fund expenses from unrestricted reserves in the event of a revenue shortfall or unforeseen situation. A lower ratio % suggests that a locality may not be in a desirable position to fund expenses from unrestricted reserves in the event of a revenue shortfall or unforeseen situation. A negative ratio % indicates that a locality has a deficit unrestricted net position.	15	A negative ratio or less than 5%= 15 points Ratio that is between 5% to 9.99%= 10 points Ratio that is between 10% to 15% = 5 points Ratio result is above 15%= 0 points Ratio Weighted at 15%
4	Change in Net Position (Ending - Beginning)/ Net Position Beginning	Financial Performance shows the magnitude of how the Locality's financial position improved or deteriorated as a result of resource flow. The percent change in net position is used to analyze this. The percent change in net position provides the magnitude of how the beginning “resource” level changed as a result of resource flow during the fiscal year.	The change should be positive rather than negative.	10	A negative ratio with a high decrease greater than/equal to (40)% = 10 points A negative ratio with an intermediate decrease between (15.01)% to (39.99)% = 6.67 points A negative ratio with lower decrease between (.01)% to (15)% = 3.33 points A positive ratio or no change= 0 points Ratio Weighted at 10%
5	Total Tax Supported Debt (Primary Govt and BTA)/FMV of Taxable Real Estate and Personal Property	This ratio looks at the total debt burden of a locality by measuring total direct/tax supported debt outstanding to the locality's fair market value of total taxable real estate and personal property, using data from the Virginia Department of Taxation's annual report at Table 6.2- "Real Estate Fair Market Value (FMV), Fair Market Value (Taxable), and Local Levy by Locality" and "Tangible Personal Property, Machinery and Tools, Merchants' Capital, and Public Service Corporations Assessed Values and Levies by Locality" at Table 6.4 as of the most recent tax year.	This ratio will review any general bonded/moral obligation, i.e.: revenue/tax supported, type of debt that is disclosed in each locality’s long term debt footnote of the CAFR, for governmental and business type activities (does not include any component unit debt). The APA has excluded debt from this ratio related to revenue bonds, capital leases, pension, compensated absences, other postemployment benefits, pollution remediation obligations, and any other types of liabilities that may be unique to a locality on a case by case basis, and not supported by general tax revenues. The APA is using standard methodology to what other professionals use for this ratio, i.e.: Virginia Resources Authority (VRA), International City/County Management Association (ICMA), GASB statistical reporting. An increase in net direct long-term debt as a percentage of real property valuation can indicate that a locality's ability to repay its obligations is trending negatively. The APA uses similar standards to how VRA, ICMA and others review trends with this ratio= Less than 3% indicates a stronger ratio result; between 3% to 6% is adequate; and a ratio of 6.01% or above is weak	10	A ratio of 6.01% or above= 10 points A ratio that is between 3.01% to 6.00%= 5 points Ratio that is less than 3%= 0 points Ratio Weighted at 10%

Note: Ratios 6-11 are calculated primarily using the General Fund (GF) activity from the Locality's Balance Sheet (Governmental Funds) and Income Statement (Governmental Funds Statement of Revenues, Expenditures, and Changes in Fund Balance). In some instances, if a locality has a separate Debt Service fund, data from that fund is used for ratio 9. Ratio 12 is calculated based on Income Statement activity of the Enterprise funds (if applicable to locality).

Ratio	Ratio Calculations	Ratio Description	Ratio Results Interpretation	Max Points per Ratio	Assignment of Points Based on Ratio Results
6	Unassigned + Assigned (plus other Committed FB where applicable) Fund Balances/ Total Expenditures	This ratio measures the sufficiency of unrestricted reserves relative to the locality's operating expenditures. By comparing the locality's unassigned and assigned fund balances to its operating expenditures, we can see to what extent the locality can fund operating expenditures from reserves in the event of a revenue shortfall or unforeseen situation.	A higher ratio % suggests that a locality is in a desirable position to fund expenses from unrestricted reserves in the event of a revenue shortfall or unforeseen situation. A lower ratio % suggests that a locality may not be in a desirable position to fund expenses from unrestricted reserves in the event of a revenue shortfall or unforeseen situation. A negative ratio % indicates that a locality has a deficit unassigned fund balance in its general fund.	15	A negative ratio or less than 5%= 15 points Ratio that is between 5% to 9.99%= 10 points Ratio that is between 10% to 15% = 5 points Ratio result is above 15%= 0 points Ratio Weighted at 15%
7	Total Fund Balance/ Total Revenues	This ratio measures the sufficiency of reserves relative to the locality's general fund revenue. By comparing the locality's reserves to its revenue, we can see to what extent the locality can make up revenue shortfalls with reserves.	A higher ratio % suggests that a locality is in a desirable position to have sufficient reserves in the event of a revenue shortfall. A lower ratio % suggests that a locality may not be in a desirable position to have sufficient reserves in the event of a revenue shortfall.	10	A negative ratio or less than 5%= 10 points Ratio that is between 5% to 9.99%= 5 points Ratio result is above 10%= 0 points Ratio Weighted at 10%
8	Total Revenues/ Total Expenditures	The Service Obligation (Operations Ratio) measures whether or not a locality's annual revenues were sufficient to pay for annual operations. This ratio does not typically account for Other Financing Sources, such as Transfers In.	This ratio has a natural benchmark of 1.0 or higher. A ratio result under 100% means that Expenditures exceed Revenues in the General fund.	10	Ratio less than 59.99% = 10 points Ratio that is between 99.99% to 60%= 5 points Ratio equal to or greater than 100%= 0 points Ratio Weighted at 10%
9	Debt Service Principle and Interest/Total Revenues paying the debt service	This ratio measures total debt service expenditures divided by total revenues (for applicable governmental funds, since some localities account for debt service in separate governmental funds, i.e.: debt service or capital project fund outside of the General Fund). This ratio identifies the percent of the locality's budget that is used or needed for repayment of debt.	Higher debt service expenditures to total revenues is unfavorable since the entity spends more of its current budget on debt repayment. An increasing trend of debt service expenditures to total revenues may mean the percentage of budget dedicated to debt payments is increasing; and therefore, less revenue will be available for asset repair/ replacement or meeting current service demands. As debt service increases, it adds to a locality's obligations and reduces the locality's expenditure flexibility.	10	Ratio more than 20% = 10 points Ratio that is between 10% to 20%= 5 points Ratio less than/equal to 10%= 0 points Ratio Weighted at 10%
10	Change in General Fund Unassigned Fund Balance (Current Year Ending - Prior Year Ending/ Prior Year Ending)	This ratio identifies changes (increases or decreases) in unassigned fund balances from the prior year to the current year and is useful in identifying a locality whose unassigned fund balance is deteriorating.	This indicator is important in identifying a trend of a deteriorating unassigned fund balance as well as how rapidly it is deteriorating. A positive change is more favorable than a negative change, particularly over a period of years.	10	A negative ratio with a high decrease greater than/equal to (30)% = 10 points A negative ratio with an intermediate decrease between (15.01)% to (19.99)% = 6.67 points A negative ratio with lower decrease between (.01)% to (15)% = 3.33 points A positive ratio or no change= 0 points Ratio Weighted at 10%
11	Intergovernmental Operating Revenues/ Total Revenues	This ratio looks at a locality's reliance on revenues coming from other governmental revenues- i.e.: grants and aid coming from Federal and State	Generally, an increasing amount of intergovernmental operating revenues as a percentage of gross operating revenues is viewed unfavorably, as it may indicate an overdependence on these revenue sources. The key is to determine the government’s vulnerability to reductions of such revenues. The external source may withdraw the funds and leave the locality with the dilemma of cutting programs or paying for them with General Fund resources.	10	Ratio is equal to/more than 50% = 10 points Ratio that is between 25% to 50%= 5 points Ratio less than 25%= 0 points Ratio Weighted at 10%
12	**Proprietary Fund Statements- Enterprise Fund Activity ONLY:** Change in Net Position - Net Fund Transfers To (From) Govt Funds/ Expenses	This ratio is known as the "Business Type Activity Self Sufficiency" which measures the percent of business-type activity expenses that were covered by business-type activity **non-transfer** revenues. If a locality has an enterprise fund that is not self- sufficient and not self-supporting, but continues to rely on general fund transfers to support the enterprise fund, this could be a sign of distress.	Other financial ratios focus on either the general fund or total governmental funds because business-type activities are expected to recover their own costs through charges for services or other revenues. A measure of 100% or greater indicates that business-type activities as a whole were successful in recovering the full costs of service through charges for services or other revenues. A measure of less than 100% indicates that business-type activities had to borrow from the past (by spending down assets or fund balance), borrow from the future (by increasing liabilities) or be subsidized by governmental funds through transfers. While the measure shows coverage in total, an important factor to consider is whether any transfers or loans were required for individual enterprise funds.	10	Ratio equal to or higher than 100%= 0 points Ratio that is between 50% to 99.99%= 5 points Ratio that is between 1% to 49.99%= 10 points Ratio Weighted at 10%
				125	**Total/Highest # of Potential Points To Score For All Financial Ratios**